Remarks

This Amendment is responsive to the Office Action of October 19, 2004. Claims 1-4 remain for consideration.

1,2. Claim 1 is rejected as anticipated by Kirwan et al (Kirwan). Kirwan provides reformate to the exhaust catalyst 24 only to accelerate its heating "for a period of time" (column 5, line 22). As soon as the "catalyst 24 is sufficiently heated, reformate 18b is turned off to the exhaust stream 22." Further, Kirwan states that the syngas "18b is supplied to the exhaust 22 with an overall lean condition at the catalyst 24 until the catalyst 24 is sufficiently heated...." (Column 5, lines 42-44). Kirwan only supplies syngas to the catalyst at startup, and then turns off the supply of syngas to the catalyst. Kirwan does not disclose "first periods of time interspersed with second periods of time" as recited in claim 1. Although that is clear enough, to make it still clearer, claim 1 is amended to state that the interspersed periods of time are "repetitive, during operation of said engine".

There are no second periods of time in Kirwan; the allegation that "during higher loads, syngas is supplied at smaller amounts to the engine" is not true. Instead, "...at higher engine loads, the present control system blends gasoline 14b with reformate 18a to meet engine torque requirements...." (Column 5, lines 39-42). Kirwan does not have interspersed periods of time and Kirwan does not reduce syngas at higher loads. But this is irrelevant to the claimed invention anyway. The rejection therefore fails because, for anticipation, the reference must "teach every element of the claims" (MPEP 2131). Therefore, reconsideration and allowance of amended claim 1 is hereby respectfully requested.

3,4. Claims 2 and 3 are rejected as obvious over Bromberg et al (Bromberg) in view of Kirwan. Bromberg discloses providing "hydrogen-rich gas normally used in the engine, turbine, boiler or burner to reduce emissions. During absorber catalyst regeneration, part or all of the hydrogen-rich gas from the plasma

fuel converter 12 can be redirected into the absorber catalyst unit as shown in Fig. 5 with a portion directed into the engine 26." (Column 4, lines 47-52) The portions of claims 2 and 3, specifically, "(a) diverting said syngas from said NOx trap assembly to an inlet to said engine" have been cancelled. Neither of the references disclose reducing the amount of generated syngas nor feeding the reformer from a mini CPO, during second periods of time, as called for in amended claims 2 and 3. Therefore, reexamination of amended claims 2 and 3 and allowance thereof over Bromberg and Kirwan is hereby requested.

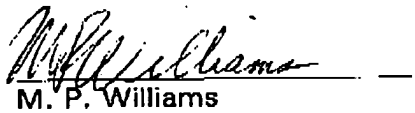
5. Claim 4 is rejected as claim 3 in view of official notice. Claim 4 is patentable for the same reasons as claim 3 and its allowance is hereby requested.

6. Consideration of the IDS is noted.

7. It is agreed the other references are less relevant than those discussed hereinbefore.

8. Should the foregoing not be persuasive in any respect, a telephone call is earnestly solicited.

Respectfully submitted,



M. P. Williams
Attorney of Record
Voice: 860-649-0305
Fax: 860-649-1385

210 Main Street
Manchester, CT 06040

Date: December 6, 2004